

**DRAFT**

**BRIEFING PAPER**

**ON THE 2000 INFANT MORTALITY RATE**

**FOR THE**

**DISTRICT OF COLUMBIA**

**Prepared by**

**The State Center for Health Statistics Administration**  
**Department of Health**

**Government of the District of Columbia**  
**Anthony A Williams, Mayor**

**February 22, 2002**



## TABLE OF CONTENTS

<b>STATISTICAL OVERVIEW .....</b>	<b>1</b>
<b>FACTORS CONTRIBUTING TO INFANT MORTALITY .....</b>	<b>3</b>
<b>GEOGRAPHIC DISTRIBUTION.....</b>	<b>5</b>
<b>TABLES</b>	
<b>TABLE 1: Ten-Year Infant Mortality Trends (1991-2000) .....</b>	<b>1</b>
<b>TABLE 2: Low Birthweight Babies by Race.....</b>	<b>3</b>
<b>TABLE 3: Low Birthweight Babies by Age of Mother .....</b>	<b>4</b>
<b>TABLE 4: Low Birth Weight Babies to Hispanic Mothers by Age of Mother .....</b>	<b>5</b>
<b>TABLE 5: Births, Infant Deaths and Infant Mortality Rates by Ward .....</b>	<b>6</b>
<b>TABLE 6: Statistical Overview by Ward (2000).....</b>	<b>7</b>
<b>TABLE 7: Statistical Overview by Ward (1999).....</b>	<b>8</b>
<b>TABLE 8: Comparisons to Other Cities.....</b>	<b>8</b>

## BRIEFING PAPER ON THE 2000 INFANT MORTALITY RATE

### Statistical Overview

There has been an overall declining trend in the infant mortality rate over the past ten years from 1991 to 2000. During this ten-year period, the number of infant deaths declined from 235 in 1991 to 91 in 2000 resulting in an overall decline in the District's infant mortality rate of 41.1 percent between 1991 and 2000. There were 144 fewer infant deaths in 2000 compared to 1991 and there were 3,984 fewer live births in 2000 compared to 1991. Table 1 presents a ten-year summary of these statistics

In 2000 there were 7,666 live births and 91 infant deaths to District of Columbia residents (Table 1). This resulted in an infant mortality rate of 11.9 deaths for every 1,000 live births. In 1999 there were 7,513 live births and 113 infant deaths. The infant mortality rate for 1999 was 15.0 deaths per 1,000 live births. There were 22 fewer infant deaths in 2000 than in 1999 and 153 more births to District women in 2000 as compared to 1999. Ward 3 had the lowest infant mortality rate at 1.2 deaths per 1,000 live births and Ward 6 had the highest infant mortality rate at 20.1 deaths per 1,000 live births.

<b>Table 1: Ten-Year Infant Mortality Trends District of Columbia Residents, 1991-2000</b>			
<b>Year</b>	<b>Births</b>	<b>Infant Deaths</b>	<b>Infant Mortality Rate*</b>
1991	11,650	235	20.2
1992	10,939	200	18.3
1993	10,614	177	16.7
1994	9,911	180	18.2
1995	8,993	145	16.1
1996	8,377	121	14.4
1997	7,916	104	13.1
1998	7,678	96	12.5
1999	7,513	113	15.0
2000	7,666	91	11.9

\* Per 1,000 live births

Source: D.C. State Center for Health Statistics Administration.



## **1999 to 2000 Comparisons**

- # The number of infant deaths decreased from 113 in 1999 to 91 in 2000.
- # The overall infant mortality rate for the District decreased by 20.7 percent from a rate of 15.0 in 1999 per 1,000 live births to 11.9 per 1,000 live births for 2000.
- # The infant mortality rates increased in Wards 1, 6, and 7.
- # The postneonatal death rate (deaths occurring from 28 days to under one year of age) was 3.1 per 1,000 live births in 2000 compared to 3.3 per 1,000 live births in 1999, a decline of 6.1 percent.
- # Death to infants younger than 28 days decreased by 25.6 percent from 11.7 per 1,000 in 1999 to 8.7 per 1,000 in 2000.
- # The infant death rate to black mothers decreased from 18.5 per 1,000 live births in 1999 to 15.1 per 1,000 live births in 2000.
- # The infant death rate to white mothers decreased from 8.2 per 1,000 live births in 1999 to 1.3 per 1,000 live births in 2000.
- # The infant death rate to Hispanic mothers increased from 8.3 per 1,000 live births in 1999 to 8.8 per 1,000 live births in 2000.
- # The number of infant deaths that resulted from multiple births decreased from 23 in 1999 to 9 in 2000.
- # Births to teenage mothers decreased from 14.8 percent of the total in 1999 to 14.2 percent of the total in 2000.

Of the 91 infant deaths that occurred in 2000, sixty-seven (or 73.6 percent) occurred during the neonatal period (under 28 days of life). The neonatal death rate decreased by 25.6 percent from 11.7 per 1,000 live births in 1999 to 8.7 per 1,000 live births in 2000. The neonatal period is important relative to efforts to reduce infant mortality. Many of the causes of infant deaths during this period could have been mitigated or prevented with preconception and prenatal care.

## Factors Contributing to Infant Mortality

Vital statistics over the years have indicated that factors such as low birth weight and lack of adequate prenatal care are associated with infant mortality. In 2000, the percentage of low birth weight infants (those weighing under 2,500 grams or 5.5 pounds) in the District was 11.9 compared to 13.3 percent in 1999 (Table 2). This represents a decrease of 10.5 percent. The percentage of low birth weight babies that were born to all black mothers decreased from 16.3 in 1999 to 14.1 in 2000. Comparatively, there was an increase in low birth weight babies born to all white mothers, from 6.4 in 1999 to 6.8 in 2000.

<b>Table 2: Percent Distribution of Low Birth Weight Babies by Race of Mother District of Columbia Residents, 1999 and 2000</b>			
<b>Race</b>	<b>1999</b>	<b>2000</b>	<b>Percent Change</b>
Total Births for All Races	7,513	7,666	
- Number Low Birth Weight	997	913	
- Percentage among all Births	13.3%	11.9%	-10.5
Total Births to Black Mothers	5,081	5,047	
- Number Low Birth Weight	827	712	
- Percentage among Births to Black Mothers	16.3%	14.1%	-13.5
Total Births to White Mothers	1,467	1,541	
- Number Low Birth Weight	94	105	
- Percentage among Births to White Mothers	6.4%	6.8%	6.2

Low Birth Weight means under 2,500 grams or 5lbs. 8oz.

Source: D.C. State Center for Health Statistics Administration.

In the District of Columbia the percentage of low birth weight infants born to all mothers under 20 years of age decreased from 12.7 in 1999 to 10.8 in 2000 (Table 3). The percentage of low birth weight babies born to all mothers 20 years of age and older decreased from 13.3 percent in 1999 to 12.1 percent in 2000.

<b>Table 3: Percent Distribution of Low Birth Weight Babies by Age of Mother District of Columbia Residents, 1999 and 2000</b>			
	<b>1999</b>	<b>2000</b>	<b>Percent Change</b>
Total Births for All Ages	7,513	7,666	
- Number of Low Birth Weight	997	913	
- Percentage of Low Birth Weight	13.3%	11.9%	-10.5
Total Births to Mothers Under 20 Years of Age	1,113	1,086	
- Number of Low Birth Weight	141	117	
- Percentage of Low Birth Weight among mothers < 20 years old	12.7%	10.8%	-15.0
Total Births to Mothers 20 Years of Age and Older	6,383	6,571	
- Number of Low Birth Weight	851	795	
- Percentage of Low Birth Weight among mothers $\geq$ 20 years old	13.3%	12.1%	-9.0
Total Births to Mothers Whose Age is Unknown	17	9	
- Number of Low Birth Weight	5	1	
- Percentage of Low Birth Weight	29.4%	11.1%	-

Low Birth Weight means under 2,500 grams or 5lbs. 8oz.

Source: D.C. State Center for Health Statistics Administration.



## Hispanic Outcomes

The number of births to Hispanic mothers increased from 842 in 1999 to 906 in 2000. Of these births, seven infants died in 1999 and eight infants died in 2000. Thus, the infant mortality rate increased by 6 percent from 8.3 per 1,000 live births in 1999 to 8.8 per 1,000 live births in 2000. Overall, the percentage of low birth weight infants increased by 25.4 from 6.7 in 1999 to 8.4 in 2000. From 1999 to 2000, the percentage of low birth weight babies increased both to mothers under 20 years of age and to mother 20 years and older (Table 4).

<b>Table 4: Percent Distribution of Low Birth Weight Babies to Hispanic Mothers by Age of Mother District of Columbia Residents, 1999 and 2000</b>			
	<b>1999</b>	<b>2000</b>	<b>Percent Change</b>
Total Births to Hispanic Mothers for All Ages	842	906	
- Number of Low Birth Weight	56	76	
- Percentage of Low Birth Weight	6.7%	8.4%	25.4
Total Births to Mothers Under 20 Years of Age	120	137	
- Number of Low Birth Weight	7	10	
- Percentage of Low Birth Weight among mothers < 20 years old	5.8%	7.3%	25.9
Total Births to Mothers 20 Years of Age and Older	718	768	
- Number of Low Birth Weight	46	66	
- Percentage of Low Birth Weight among mothers $\geq$ 20 years old	6.4%	8.6%	34.4
Total Births to Mothers Whose Age is Unknown	4	1	
- Number of Low Birth Weight	1	0	
- Percentage of Low Birth Weight	25.0%	-	-

Low Birth Weight means under 2,500 grams or 5lbs. 8oz.

Note: (1) Due to the small number of births, the above percentages should be interpreted cautiously.

Source: D.C. State Center for Health Statistics Administration.

## Geographical Distribution

The presence of geographical subdivisions such as Wards and Census Tracts in the District provides a basis for breaking down District-wide data into small area statistics for comparison and analyses. In the absence of individual-level socioeconomic data, these Ward statistics form a useful basis for evaluating health status indicators against demographic and environmental Ward characteristics. In 2000, there was an increase in the number of infants born in all but three Wards of the city. The infant mortality breakdown by Ward for 2000 shows a decline in the infant mortality rate for Wards 2, 3, 4, 5, and 8. The infant mortality rate increased in the other three Wards (1, 6 and 7). Among the three Wards with increased infant mortality rates for 2000, Ward 6 had a large increase from a rate of 13.3 in 1999 to 20.1 in 2000. The number of infant deaths increased by 6 in Ward 6 for 2000 (Table 5).

<b>Table 5: Births, Infant Deaths and Infant Mortality Rates by Ward District of Columbia Residents, 1999 and 2000</b>						
	<b>Births</b>		<b>Infant Deaths</b>		<b>Infant Mortality Rate*</b>	
<b>Ward</b>	<b>2000</b>	<b>1999</b>	<b>2000</b>	<b>1999</b>	<b>2000</b>	<b>1999</b>
1	1,175	1,112	11	10	9.4	9.0
2	788	799	6	10	7.6	12.5
3	834	854	1	5	1.2	5.9
4	938	936	5	14	5.3	15.0
5	860	809	12	18	14.0	22.2
6	846	824	17	11	20.1	13.3
7	921	941	16	11	17.4	11.7
8	1,297	1,237	23	34	17.7	27.5
Unknown	7	1	-	-	-	-
Total	7,666	7,513	91	113	11.9	15.0

\*Infant deaths per 1,000 live births.

Note: (1) Due to the small number of infant deaths, the above infant mortality rates are highly variable and should be interpreted cautiously.

Source: D.C. State Center for Health Statistics Administration.

<b>Table 6: Statistical Overview by Ward District of Columbia Residents, 2000</b>						
<b>Ward</b>	<b>Births</b>	<b>Infant Deaths</b>	<b>IMR*</b>	<b>LBW</b>	<b>Teen Births</b>	<b>LBW to Teens</b>
1	1,175	11	9.4	121	139	19
2	788	6	7.6	91	99	12
3	834	1	1.2	65	6	1
4	938	5	5.3	91	115	7
5	860	12	14.0	114	155	15
6	846	17	20.1	106	138	15
7	921	16	17.4	124	184	18
8	1,297	23	17.7	201	250	30
Unknown	7	-	-	-	-	-
Total	7,666	91	11.9	913	1,086	117

\* Infant deaths per 1,000 live births.

Notes: (1) Teen birth means birth to a mother under 20 years of age.

(2) LBW means low birth weight (under 2,500 grams or 5 lbs. 8 oz.).

(3) Due to the small number of infant deaths, the above infant mortality rates are highly variable and should be interpreted cautiously.

Source: D.C. State Center for Health Statistics Administration.

<b>Table 7: Statistical Overview by Ward District of Columbia Residents, 1999</b>						
<b>Ward</b>	<b>Births</b>	<b>Infant Deaths</b>	<b>IMR*</b>	<b>LBW</b>	<b>Teen Births</b>	<b>LBW to Teens</b>
1	1,112	10	9.0	128	162	18
2	799	10	12.5	87	83	9
3	854	5	5.9	55	6	0
4	936	14	15.0	118	110	12
5	809	18	22.2	140	159	18
6	824	11	13.3	116	152	24
7	941	11	11.7	155	194	29
8	1,237	34	27.5	198	247	31
Unknown	1	-	-	-	-	-
Total	7,513	113	15.0	997	1,113	141

\* Infant deaths per 1,000 live births.

Notes: (1) Teen birth means birth to a mother under 20 years of age.

(2) LBW means low birth weight (under 2,500 grams or 5 lbs. 8 oz.).

(3) Due to the small number of infant deaths, the above infant mortality rates are highly variable and should be interpreted with caution.  
Source: D.C. State Center for Health Statistics Administration.

**Table 8: Infant Mortality Rate Comparisons for Baltimore,  
The District of Columbia and Detroit, 1998-2000**

<b>Cities</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>
Baltimore	12.2	13.5	11.7
District of Columbia	12.5	15.0	11.9
Detroit	14.7	15.5	14.7

Sources: D.C. State Center for Health Statistics Administration.

Vital Statistics Administration, Department of Health and Mental Hygiene, Maryland.